

Union Calendar No. 68

110TH CONGRESS
1ST SESSION

H. R. 1867

[Report No. 110–114]

To authorize appropriations for fiscal years 2008, 2009, and 2010 for the National Science Foundation, and for other purposes.

IN THE HOUSE OF REPRESENTATIVES

APRIL 17, 2007

Mr. BAIRD (for himself, Mr. EHLERS, Mr. GORDON of Tennessee, Ms. HOOLEY, Mr. BILBRAY, Mr. MCNERNEY, and Mr. HILL) introduced the following bill; which was referred to the Committee on Science and Technology

APRIL 30, 2007

Additional sponsors: Mr. LIPINSKI, Mr. UDALL of Colorado, Mr. HALL of Texas, Mr. ROTHMAN, Mr. SMITH of Washington, Mr. HOLT, Ms. SCHAKOWSKY, Mr. MORAN of Virginia, Mr. HONDA, Mr. PRICE of North Carolina, Mr. WU, Ms. WOOLSEY, Mr. CHANDLER, Mr. REICHERT, and Mr. LAMPSON

APRIL 30, 2007

Reported with an amendment, committed to the Committee of the Whole House on the State of the Union, and ordered to be printed

[Strike out all after the enacting clause and insert the part printed in *italie*]

[For text of introduced bill, see copy of bill as introduced on April 17, 2007]

A BILL

To authorize appropriations for fiscal years 2008, 2009, and 2010 for the National Science Foundation, and for other purposes.

1 *Be it enacted by the Senate and House of Representa-*
 2 *tives of the United States of America in Congress assembled,*

3 **SECTION 1. SHORT TITLE.**

4 *This Act may be cited as the “National Science Foun-*
 5 *dation Authorization Act of 2007”.*

6 **SEC. 2. DEFINITIONS.**

7 *In this Act:*

8 (1) *BOARD.*—*The term “Board” means the Na-*
 9 *tional Science Board established under section 2 of*
 10 *the National Science Foundation Act of 1950 (42*
 11 *U.S.C. 1861).*

12 (2) *DIRECTOR.*—*The term “Director” means the*
 13 *Director of the Foundation.*

14 (3) *ELEMENTARY SCHOOL.*—*The term “elemen-*
 15 *tary school” has the meaning given that term by sec-*
 16 *tion 9101(18) of the Elementary and Secondary Edu-*
 17 *cation Act of 1965 (20 U.S.C. 7801(18)).*

18 (4) *FOUNDATION.*—*The term “Foundation”*
 19 *means the National Science Foundation.*

20 (5) *INSTITUTION OF HIGHER EDUCATION.*—*The*
 21 *term “institution of higher education” has the mean-*
 22 *ing given such term in section 101(a) of the Higher*
 23 *Education Act of 1965 (20 U.S.C. 1001(a)).*

24 (6) *SECONDARY SCHOOL.*—*The term “secondary*
 25 *school” has the meaning given that term by section*

1 9101(38) of the Elementary and Secondary Edu-
 2 cation Act of 1965 (20 U.S.C. 7801(38)).

3 **SEC. 3. AUTHORIZATION OF APPROPRIATIONS.**

4 (a) *FISCAL YEAR 2008.*—

5 (1) *IN GENERAL.*—*There are authorized to be ap-*
 6 *propriated to the Foundation \$6,500,000,000 for fis-*
 7 *cal year 2008.*

8 (2) *SPECIFIC ALLOCATIONS.*—*Of the amount au-*
 9 *thorized under paragraph (1)—*

10 (A) *\$5,080,000,000 shall be made available*
 11 *for research and related activities, of which*
 12 *\$115,000,000 shall be made available for the*
 13 *Major Research Instrumentation program;*

14 (B) *\$873,000,000 shall be made available*
 15 *for education and human resources, of which—*

16 (i) *\$94,000,000 shall be for Mathe-*
 17 *matics and Science Education Partnerships*
 18 *established under section 9 of the National*
 19 *Science Foundation Authorization Act of*
 20 *2002 (42 U.S.C. 1862n);*

21 (ii) *\$70,000,000 shall be for the Robert*
 22 *Noyce Scholarship Program established*
 23 *under section 10 of the National Science*
 24 *Foundation Authorization Act of 2002 (42*
 25 *U.S.C. 1862n–1);*

1 (iii) \$44,000,000 shall be for the
2 Science, Mathematics, Engineering, and
3 Technology Talent Expansion Program es-
4 tablished under section 8(7) of the National
5 Science Foundation Authorization Act of
6 2002 (Public Law 107–368); and

7 (iv) \$51,620,000 shall be for the Ad-
8 vanced Technological Education program
9 established by section 3(a) of the Scientific
10 and Advanced-Technology Act of 1992 (Pub-
11 lic Law 102–476);

12 (C) \$245,000,000 shall be made available
13 for major research equipment and facilities con-
14 struction;

15 (D) \$285,600,000 shall be made available
16 for agency operations and award management;

17 (E) \$4,050,000 shall be made available for
18 the Office of the National Science Board; and

19 (F) \$12,350,000 shall be made available for
20 the Office of Inspector General.

21 (b) FISCAL YEAR 2009.—

22 (1) IN GENERAL.—There are authorized to be ap-
23 propriated to the Foundation \$6,980,000,000 for fis-
24 cal year 2009.

1 (2) *SPECIFIC ALLOCATIONS.*—Of the amount au-
2 thorized under paragraph (1)—

3 (A) \$5,457,400,000 shall be made available
4 for research and related activities, of which
5 \$123,100,000 shall be made available for the
6 Major Research Instrumentation program;

7 (B) \$934,000,000 shall be made available
8 for education and human resources, of which—

9 (i) \$100,600,000 shall be for Mathe-
10 matics and Science Education Partnerships
11 established under section 9 of the National
12 Science Foundation Authorization Act of
13 2002 (42 U.S.C. 1862n);

14 (ii) \$101,000,000 shall be for the Rob-
15 ert Noyce Scholarship Program established
16 under section 10 of the National Science
17 Foundation Authorization Act of 2002 (42
18 U.S.C. 1862n–1);

19 (iii) \$55,000,000 shall be for the
20 Science, Mathematics, Engineering, and
21 Technology Talent Expansion Program es-
22 tablished under section 8(7) of the National
23 Science Foundation Authorization Act of
24 2002 (Public Law 107–368); and

1 (iv) \$55,200,000 shall be for the Ad-
 2 vanced Technological Education program as
 3 established by section 3(a) of the Scientific
 4 and Advanced-Technology Act of 1992 (Pub-
 5 lic Law 102–476);

6 (C) \$262,000,000 shall be made available
 7 for major research equipment and facilities con-
 8 struction;

9 (D) \$309,760,000 shall be made available
 10 for agency operations and award management;

11 (E) \$4,120,000 shall be made available for
 12 the Office of the National Science Board; and

13 (F) \$12,720,000 shall be made available for
 14 the Office of Inspector General.

15 (c) FISCAL YEAR 2010.—

16 (1) IN GENERAL.—There are authorized to be ap-
 17 propriated to the Foundation \$7,493,000,000 for fis-
 18 cal year 2010.

19 (2) SPECIFIC ALLOCATIONS.—Of the amount au-
 20 thorized under paragraph (1)—

21 (A) \$5,863,200,000 shall be made available
 22 for research and related activities, of which
 23 \$131,700,000 shall be made available for the
 24 Major Research Instrumentation program;

1 (B) \$1,003,000,000 shall be made available
2 for education and human resources, of which—

3 (i) \$107,600,000 shall be for Mathe-
4 matics and Science Education Partnerships
5 established under section 9 of the National
6 Science Foundation Authorization Act of
7 2002 (42 U.S.C. 1862n);

8 (ii) \$133,000,000 shall be for the Rob-
9 ert Noyce Scholarship Program established
10 under section 10 of the National Science
11 Foundation Authorization Act of 2002 (42
12 U.S.C. 1862n-1);

13 (iii) \$60,000,000 shall be for the
14 Science, Mathematics, Engineering, and
15 Technology Talent Expansion Program es-
16 tablished under section 8(7) of the National
17 Science Foundation Authorization Act of
18 2002 (Public Law 107-368); and

19 (iv) \$59,100,000 shall be for the Ad-
20 vanced Technological Education program as
21 established by section 3(a) of the Scientific
22 and Advanced-Technology Act of 1992 (Pub-
23 lic Law 102-476);

1 (C) \$280,000,000 shall be made available
 2 for major research equipment and facilities con-
 3 struction;

4 (D) \$329,450,000 shall be made available
 5 for agency operations and award management;

6 (E) \$4,250,000 shall be made available for
 7 the Office of the National Science Board; and

8 (F) \$13,100,000 shall be made available for
 9 the Office of Inspector General.

10 (d) *MAJOR RESEARCH INSTRUMENTATION.*—

11 (1) *AWARD AMOUNT.*—*The minimum amount of*
 12 *an award under the Major Research Instrumentation*
 13 *program shall be \$100,000. The maximum amount of*
 14 *an award under the program shall be \$4,000,000, ex-*
 15 *cept if the total amount appropriated for the program*
 16 *for a fiscal year exceeds \$125,000,000, in which case*
 17 *the maximum amount of an award shall be*
 18 *\$6,000,000.*

19 (2) *USE OF FUNDS.*—*In addition to the acquisi-*
 20 *tion of instrumentation and equipment, funds made*
 21 *available by awards under the Major Research Instru-*
 22 *mentation program may be used to support the oper-*
 23 *ations and maintenance of such instrumentation and*
 24 *equipment.*

25 (3) *COST SHARING.*—

1 (A) *IN GENERAL.*—*An institution of higher*
2 *education receiving an award shall provide at*
3 *least 30 percent of the cost from private or non-*
4 *Federal sources.*

5 (B) *EXCEPTIONS.*—*Institutions of higher*
6 *education that are not Ph.D.-granting institu-*
7 *tions are exempt from the cost sharing require-*
8 *ment in subparagraph (A), and the Director*
9 *may reduce or waive the cost sharing require-*
10 *ment for—*

11 (i) *institutions—*

12 (I) *which are not ranked among*
13 *the top 100 institutions receiving Fed-*
14 *eral research and development funding,*
15 *as documented by the statistical data*
16 *published by the Foundation; and*

17 (II) *for which the proposed project*
18 *will make a substantial improvement*
19 *in the institution's capabilities to con-*
20 *duct leading edge research, to provide*
21 *research experiences for undergraduate*
22 *students using leading edge facilities,*
23 *and to broaden the participation in*
24 *science and engineering research by in-*
25 *dividuals identified in section 33 or 34*

1 *of the Science and Engineering Equal*
2 *Opportunities Act (42 U.S.C. 1885a or*
3 *1885b); and*

4 *(ii) consortia of institutions of higher*
5 *education that include at least one institu-*
6 *tion that is not a Ph.D-granting institu-*
7 *tion.*

8 (e) *UNDERGRADUATE EDUCATION PROGRAMS.—The*
9 *Director shall continue to carry out programs in support*
10 *of undergraduate education, including those authorized in*
11 *section 17 of the National Science Foundation Authoriza-*
12 *tion Act of 2002 (42 U.S.C. 1862n–6). Funding for these*
13 *programs shall increase in proportion to the increase in the*
14 *total amount appropriated to the Foundation in any year*
15 *for which appropriations are authorized by this Act.*

16 (f) *LIMIT ON PROPOSALS.—*

17 (1) *POLICY.—For programs that require as part*
18 *of the selection process for awards the submission of*
19 *preproposals and that also limit the number of*
20 *preproposals that may be submitted by an institution,*
21 *the Director shall allow the subsequent submission of*
22 *a full proposal based on each preproposal that is de-*
23 *termined to have merit following the Foundation’s*
24 *merit review process.*

1 (2) *REVIEW AND ASSESSMENT OF POLICIES.*—

2 *The Board shall review and assess the effects on insti-*
3 *tutions of higher education of the policies of the Foun-*
4 *dation regarding the imposition of limitations on the*
5 *number of proposals that may be submitted by a sin-*
6 *gle institution for programs supported by the Foun-*
7 *dation. The Board shall determine whether current*
8 *policies are well justified and appropriate for the*
9 *types of programs that limit the number of proposal*
10 *submissions. Not later than 1 year after the date of*
11 *enactment of this Act, the Board shall summarize its*
12 *findings and any recommendations regarding changes*
13 *to the current policy on the restriction of proposal*
14 *submissions in a report to the Committee on Science*
15 *and Technology of the House of Representatives and*
16 *to the Committee on Commerce, Science, and Trans-*
17 *portation and the Committee on Health, Education,*
18 *Labor, and Pensions of the Senate.*

19 (g) *RESEARCH EXPERIENCES FOR UNDERGRADU-*
20 *ATES.*—*The Director shall increase funding for the Research*
21 *Experiences for Undergraduates program in proportion to*
22 *the increase in the total amount appropriated to the Foun-*
23 *dation for research and related activities in any year for*
24 *which appropriations are authorized by this Act.*

1 **SEC. 4. CENTERS FOR RESEARCH ON LEARNING AND EDU-**
 2 **CATION IMPROVEMENT.**

3 (a) *FUNDING FOR CENTERS.*—*The Director shall con-*
 4 *tinue to carry out the program of Centers for Research on*
 5 *Learning and Education Improvement as established in*
 6 *section 11 of the National Science Foundation Authoriza-*
 7 *tion Act of 2002 (42 U.S.C. 1862n–2).*

8 (b) *ELIGIBILITY FOR CENTERS.*—*Section 11 of the Na-*
 9 *tional Science Foundation Authorization Act of 2002 (42*
 10 *U.S.C. 1862n–2) is amended—*

11 (1) *in subsection (a)(1), by inserting “or eligible*
 12 *nonprofit organizations” after “institutions of higher*
 13 *education”;*

14 (2) *in subsection (b)(1) by inserting “or an eligi-*
 15 *ble nonprofit organization” after “institution of high-*
 16 *er education”; and*

17 (3) *in subsection (b)(1) by striking “of such in-*
 18 *stitutions” and inserting “thereof”.*

19 **SEC. 5. INTERDISCIPLINARY RESEARCH.**

20 (a) *IN GENERAL.*—*The Board shall evaluate the role*
 21 *of the Foundation in supporting interdisciplinary research,*
 22 *including through the Major Research Instrumentation pro-*
 23 *gram, the effectiveness of the Foundation’s efforts in pro-*
 24 *viding information to the scientific community about op-*
 25 *portunities for funding of interdisciplinary research pro-*
 26 *posals, and the process through which interdisciplinary pro-*

1 posals are selected for support. The Board shall also evalu-
 2 ate the effectiveness of the Foundation's efforts to engage un-
 3 dergraduate students in research experiences in inter-
 4 disciplinary settings, including through the Research in
 5 Undergraduate Institutions program and the Research Ex-
 6 periences for Undergraduates program.

7 (b) *REPORT.*—Not later than 1 year after the date of
 8 enactment of this Act, the Board shall provide the results
 9 of its evaluation under subsection (a), including a rec-
 10 ommendation for the proportion of the Foundation's re-
 11 search and related activities funding that should be allo-
 12 cated for interdisciplinary research, to the Committee on
 13 Science and Technology of the House of Representatives and
 14 the Committee on Commerce, Science, and Transportation
 15 and the Committee on Health, Education, Labor, and Pen-
 16 sions of the Senate.

17 **SEC. 6. PILOT PROGRAM OF GRANTS FOR NEW INVESTIGA-**
 18 **TORS.**

19 (a) *IN GENERAL.*—The Director shall carry out a pilot
 20 program to award one-year grants to individuals to assist
 21 them in improving research proposals that were previously
 22 submitted to the Foundation but not selected for funding.

23 (b) *USE OF FUNDS.*—Grants awarded under this sec-
 24 tion shall be used to enable an individual to resubmit an
 25 updated research proposal for review by the Foundation

1 *through the agency's competitive merit review process. Uses*
2 *of funds made available under this section may include the*
3 *generation of new data and the performance of additional*
4 *analysis.*

5 (c) *ELIGIBILITY.—To be eligible to receive a grant*
6 *under this section, an individual shall—*

7 (1) *not have previously received funding as the*
8 *principal investigator of a research grant from the*
9 *Foundation; and*

10 (2) *have submitted a proposal to the Foundation,*
11 *which may include a proposal submitted to the Re-*
12 *search in Undergraduate Institutions program, that*
13 *was rated very good or excellent under the Founda-*
14 *tion's competitive merit review process.*

15 (d) *SELECTION PROCESS.—The Director shall make*
16 *awards under this section based on the advice of the pro-*
17 *gram officers of the Foundation.*

18 (e) *PROGRAM ADMINISTRATION.—The Director may*
19 *carry out this section through the Small Grants for Explor-*
20 *atory Research program.*

21 (f) *NATIONAL SCIENCE BOARD REVIEW.—The Board*
22 *shall conduct a review and assessment of the pilot program*
23 *under this section, including the number of new investiga-*
24 *tors funded, the distribution of awards by type of institu-*
25 *tion of higher education, and the success rate upon resub-*

1 *mittal of proposals by new investigators funded through this*
 2 *pilot program. Not later than 3 years after the date of en-*
 3 *actment of this Act, the Board shall summarize its findings*
 4 *and any recommendations regarding changes to or the con-*
 5 *tinuation of the pilot program in a report to the Committee*
 6 *on Science and Technology of the House of Representatives*
 7 *and the Committee on Commerce, Science, and Transpor-*
 8 *tation and the Committee on Health, Education, Labor,*
 9 *and Pensions of the Senate.*

10 **SEC. 7. BROADER IMPACTS MERIT REVIEW CRITERION.**

11 (a) *IN GENERAL.*—*In evaluating research proposals*
 12 *under the Foundation’s broader impacts criterion, the Di-*
 13 *rector shall give special consideration to proposals that in-*
 14 *volve partnerships between academic researchers and indus-*
 15 *trial scientists and engineers that address research areas*
 16 *that have been identified as having high importance for fu-*
 17 *ture national economic competitiveness, such as*
 18 *nanotechnology.*

19 (b) *PARTNERSHIPS WITH INDUSTRY.*—*The Director*
 20 *shall encourage research proposals from institutions of high-*
 21 *er education that involve partnerships with businesses and*
 22 *organizations representing businesses in fields that have*
 23 *been identified as having high importance for future na-*
 24 *tional economic competitiveness and that include input on*

1 *the research agenda from and cost-sharing by the industry*
2 *partners.*

3 *(c) REPORT ON BROADER IMPACTS CRITERION.—Not*
4 *later than 1 year after the date of enactment of this Act,*
5 *the Director shall transmit to Congress a report on the im-*
6 *pact of the broader impacts grant criterion used by the*
7 *Foundation. The report shall—*

8 *(1) identify the criteria that each division and*
9 *directorates of the Foundation uses to evaluate the*
10 *broader impacts aspects of research proposals;*

11 *(2) provide a breakdown of the types of activities*
12 *by division that awardees have proposed to carry out*
13 *to meet the broader impacts criterion;*

14 *(3) provide any evaluations performed by the*
15 *Foundation to assess the degree to which the broader*
16 *impacts aspects of research proposals were carried out*
17 *and how effective they have been at meeting the goals*
18 *described in the research proposals;*

19 *(4) describe what national goals, such as improv-*
20 *ing undergraduate science, mathematics, and engi-*
21 *neering education, improving K–12 science and*
22 *mathematics education, promoting university-indus-*
23 *try collaboration and technology transfer, and broad-*
24 *ening participation of underrepresented groups, the*

1 *broader impacts criterion is best suited to promote;*
2 *and*

3 *(5) describe what steps the Foundation is taking*
4 *and should take to use the broader impacts criterion*
5 *to improve undergraduate science, mathematics, and*
6 *engineering education.*

7 **SEC. 8. POSTDOCTORAL RESEARCH FELLOWS.**

8 *(a) MENTORING.—The Director shall require that all*
9 *grant applications that include funding to support*
10 *postdoctoral researchers include a description of the men-*
11 *toring activities that will be provided for such individuals,*
12 *and shall ensure that this part of the application is evalu-*
13 *ated under the Foundation’s broader impacts merit review*
14 *criterion. Mentoring activities may include career coun-*
15 *seling, training in preparing grant applications, guidance*
16 *on ways to improve teaching skills, and training in re-*
17 *search ethics.*

18 *(b) REPORTS.—The Director shall require that annual*
19 *reports and the final report for research grants that include*
20 *funding to support postdoctoral researchers include a de-*
21 *scription of the mentoring activities provided to such re-*
22 *searchers.*

23 **SEC. 9. RESPONSIBLE CONDUCT OF RESEARCH.**

24 *The Director shall require that each institution that*
25 *applies for financial assistance from the Foundation for*

1 science and engineering research or education describe in
 2 its grant proposal a plan to provide appropriate training
 3 and oversight in the responsible and ethical conduct of re-
 4 search to undergraduate students, graduate students, and
 5 postdoctoral researchers participating in the proposed re-
 6 search project.

7 **SEC. 10. REPORTING OF RESEARCH RESULTS.**

8 *The Director shall ensure that all final project reports*
 9 *and citations of published research documents resulting*
 10 *from research funded, in whole or in part, by the Founda-*
 11 *tion, are made available to the public in a timely manner*
 12 *and in electronic form through the Foundation's Web site.*

13 **SEC. 11. SHARING RESEARCH RESULTS.**

14 *An investigator supported under a Foundation award,*
 15 *whom the Director determines has failed to comply with*
 16 *the provisions of section 734 of the Foundation Grant Pol-*
 17 *icy Manual, shall be ineligible for a future award under*
 18 *any Foundation supported program or activity. The Direc-*
 19 *tor may restore the eligibility of such an investigator on*
 20 *the basis of the investigator's subsequent compliance with*
 21 *the provisions of section 734 of the Foundation Grant Pol-*
 22 *icy Manual and with such other terms and conditions as*
 23 *the Director may impose.*

1 **SEC. 12. FUNDING FOR SUCCESSFUL STEM EDUCATION**
2 **PROGRAMS.**

3 (a) *EVALUATION OF PROGRAMS.*—*The Director shall,*
4 *on an annual basis, evaluate all of the Foundation’s grants*
5 *that are scheduled to expire within one year and—*

6 (1) *that have the primary purpose of meeting the*
7 *objectives of the Science and Engineering Equal Op-*
8 *portunity Act (42 U.S.C. 1885 et seq.); or*

9 (2) *that have the primary purpose of providing*
10 *teacher professional development.*

11 (b) *CONTINUATION OF FUNDING.*—*For grants that are*
12 *identified under subsection (a) and that are deemed by the*
13 *Director to be successful in meeting the objectives of the ini-*
14 *tial grant solicitation, the Director may extend the duration*
15 *of those grants for up to 3 additional years beyond their*
16 *scheduled expiration without the requirement for a recom-*
17 *petition. The Director may extend such grants for an addi-*
18 *tional 3 years following a second review within 1 year be-*
19 *fore the extended completion date, in accordance with sub-*
20 *section (a), and the determination by the Director that the*
21 *objectives of the grant are being achieved.*

22 (c) *REPORT TO CONGRESS.*—*Not later than 2 years*
23 *after the date of enactment of this Act, the Director shall*
24 *submit a report to the Committee on Science and Tech-*
25 *nology of the House of Representatives and to the Com-*
26 *mittee on Commerce, Science, and Transportation and the*

1 *Committee on Health, Education, Labor, and Pensions of*
2 *the Senate that—*

3 (1) *lists the grants which have been extended in*
4 *duration by the authority provided under this section;*
5 *and*

6 (2) *provides any recommendations the Director*
7 *may have regarding the extension of the authority*
8 *provided under this section to programs other than*
9 *those specified in subsection (a).*

10 **SEC. 13. COST SHARING.**

11 (a) *IN GENERAL.—The Board shall evaluate the im-*
12 *pact of its policy to eliminate cost sharing for research*
13 *grants and cooperative agreements for existing programs*
14 *that were developed around industry partnerships and his-*
15 *torically required industry cost sharing, such as the Engi-*
16 *neering Research Centers and Industry/University Coopera-*
17 *tive Research Centers. The Board shall also consider the im-*
18 *pact that the cost sharing policy has on initiating new pro-*
19 *grams for which industry interest and participation are*
20 *sought.*

21 (b) *REPORT.—Not later than 6 months after the date*
22 *of enactment of this Act, the Board shall report to the Com-*
23 *mittee on Science and Technology and the Committee on*
24 *Appropriations of the House of Representatives, and the*
25 *Committee on Commerce, Science, and Transportation, the*

1 *Committee on Health, Education, Labor, and Pensions, and*
 2 *the Committee on Appropriations of the Senate, on the re-*
 3 *sults of the evaluation under subsection (a).*

4 **SEC. 14. DONATIONS.**

5 *Section 11(f) of the National Science Foundation Act*
 6 *of 1950 (42 U.S.C. 1870(f)) is amended by inserting at the*
 7 *end before the semicolon “, except that funds may be do-*
 8 *nated for specific prize competitions”.*

9 **SEC. 15. ADDITIONAL REPORTS.**

10 *(a) REPORT ON FUNDING FOR MAJOR FACILITIES.—*

11 *(1) PRECONSTRUCTION FUNDING.—The Board*
 12 *shall evaluate the appropriateness of the requirement*
 13 *that funding for detailed design work and other*
 14 *preconstruction activities for major research equip-*
 15 *ment and facilities come exclusively from the spon-*
 16 *soring research division rather than being available,*
 17 *at least in part, from the Major Research Equipment*
 18 *and Facilities Construction account.*

19 *(2) MAINTENANCE AND OPERATION COSTS.—The*
 20 *Board shall evaluate the appropriateness of the Foun-*
 21 *dation’s policies for allocation of costs for, and over-*
 22 *sight of, maintenance and operation of major research*
 23 *equipment and facilities.*

24 *(3) REPORT.—Not later than 6 months after the*
 25 *date of enactment of this Act, the Board shall report*

1 *on the results of the evaluations under paragraphs (1)*
 2 *and (2) and on any recommendations for modifying*
 3 *the current policies related to allocation of funding*
 4 *for major research equipment and facilities to the*
 5 *Committee on Science and Technology and the Com-*
 6 *mittee on Appropriations of the House of Representa-*
 7 *tives, and to the Committee on Commerce, Science,*
 8 *and Transportation, the Committee on Health, Edu-*
 9 *cation, Labor, and Pensions, and the Committee on*
 10 *Appropriations of the Senate.*

11 *(b) INCLUSION OF POLAR FACILITIES UPGRADES IN*
 12 *MAJOR RESEARCH EQUIPMENT AND FACILITIES CON-*
 13 *STRUCTION PLAN.—Section 201(a)(2)(D) of the National*
 14 *Science Foundation Authorization Act of 1998 (42 U.S.C.*
 15 *1862l(a)(2)(D)) is amended by inserting “and for major*
 16 *upgrades of facilities in support of Antarctic research pro-*
 17 *grams” after “facilities construction account”.*

18 *(c) REPORT ON EDUCATION PROGRAMS WITHIN THE*
 19 *RESEARCH DIRECTORATES.—Not later than 6 months after*
 20 *the date of enactment of this Act, the Director shall transmit*
 21 *to the Committee on Science and Technology of the House*
 22 *of Representatives and the Committee on Commerce,*
 23 *Science, and Transportation and the Committee on Health,*
 24 *Education, Labor, and Pensions of the Senate a report cat-*
 25 *aloging all elementary and secondary school, informal, and*

1 *undergraduate educational programs and activities sup-*
 2 *ported through appropriations for Research and Related*
 3 *Activities. The report shall display the programs and ac-*
 4 *tivities by directorate, along with estimated funding levels*
 5 *for the fiscal years 2006, 2007, and 2008, and shall provide*
 6 *a description of the goals of each program and activity. The*
 7 *report shall also describe how the programs and activities*
 8 *relate to or are coordinated with the programs supported*
 9 *by the Education and Human Resources Directorate.*

10 *(d) REPORT ON RESEARCH IN UNDERGRADUATE IN-*
 11 *STITUTIONS PROGRAM.—The Director shall transmit to*
 12 *Congress along with the fiscal year 2011 budget request a*
 13 *report listing the funding success rates and distribution of*
 14 *awards for the Research in Undergraduate Institutions pro-*
 15 *gram, by type of institution based on the highest academic*
 16 *degree conferred by the institution, for fiscal years 2008,*
 17 *2009, and 2010.*

18 *(e) ANNUAL PLAN FOR ALLOCATION OF EDUCATION*
 19 *AND HUMAN RESOURCES FUNDING.—*

20 *(1) IN GENERAL.—Not later than 60 days after*
 21 *the date of enactment of legislation providing for the*
 22 *annual appropriation of funds for the Foundation,*
 23 *the Director shall submit to the Committee on Science*
 24 *and Technology and the Committee on Appropria-*
 25 *tions of the House of Representatives, and to the Com-*

1 *mittee on Commerce, Science, and Transportation,*
2 *the Committee on Health, Education, Labor, and*
3 *Pensions, and the Committee on Appropriations of*
4 *the Senate, a plan for the allocation of education and*
5 *human resources funds authorized by this Act for the*
6 *corresponding fiscal year, including any funds from*
7 *within the research and related activities account*
8 *used to support activities that have the primary pur-*
9 *pose of improving education or broadening participa-*
10 *tion.*

11 (2) *SPECIFIC REQUIREMENTS.—The plan shall*
12 *include a description of how the allocation of fund-*
13 *ing—*

14 (A) *will affect the average size and duration*
15 *of education and human resources grants sup-*
16 *ported by the Foundation;*

17 (B) *will affect trends in research support*
18 *for the effective instruction of mathematics,*
19 *science, engineering, and technology;*

20 (C) *will affect the K-20 pipeline for the*
21 *study of mathematics, science, engineering, and*
22 *technology; and*

23 (D) *will encourage the interest of individ-*
24 *uals identified in section 33 or 34 of the Science*
25 *and Engineering Equal Opportunities Act (42*

1 *U.S.C. 1885a or 1885b) in mathematics, science,*
 2 *engineering, and technology, and help prepare*
 3 *such individuals to pursue postsecondary studies*
 4 *in these fields.*

5 **SEC. 16. ADMINISTRATIVE AMENDMENTS.**

6 *(a) TRIANNUAL AUDIT OF THE OFFICE OF THE NA-*
 7 *TIONAL SCIENCE BOARD.—Section 15(a) of the National*
 8 *Science Foundation Authorization Act of 2002 (42 U.S.C.*
 9 *4862n–5) is amended—*

10 *(1) in paragraph (3), by striking “an annual*
 11 *audit” and inserting “an audit every three years”;*

12 *(2) in paragraph (4), by striking “each year”*
 13 *and inserting “every third year”; and*

14 *(3) by inserting after paragraph (4) the fol-*
 15 *lowing new paragraph:*

16 *“(5) MATERIALS RELATING TO CLOSED POR-*
 17 *TIONS OF MEETINGS.—To facilitate the audit required*
 18 *under paragraph (3) of this subsection, the Office of*
 19 *the National Science Board shall maintain the Gen-*
 20 *eral Counsel’s certificate, the presiding officer’s state-*
 21 *ment, and a transcript or recording of any closed*
 22 *meeting, for at least 3 years after such meeting.”.*

23 *(b) LIMITED TERM PERSONNEL FOR THE NATIONAL*
 24 *SCIENCE BOARD.—Subsection (g) of section 4 of the Na-*

1 *tional Science Foundation Act of 1950 (42 U.S.C. 1863(g))*
2 *is amended to read as follows:*

3 “(g) *The Board may, with the concurrence of a major-*
4 *ity of its members, permit the appointment of a staff con-*
5 *sisting of not more than 5 professional staff members, tech-*
6 *nical and professional personnel on leave of absence from*
7 *academic, industrial, or research institutions for a limited*
8 *term and such operations and support staff members as*
9 *may be necessary. Such staff shall be appointed by the*
10 *Chairman and assigned at the direction of the Board. The*
11 *professional members and limited term technical and pro-*
12 *fessional personnel of such staff may be appointed without*
13 *regard to the provisions of title 5, United States Code, gov-*
14 *erning appointments in the competitive service, and the*
15 *provisions of chapter 51 of such title relating to classifica-*
16 *tion, and shall be compensated at a rate not exceeding the*
17 *maximum rate payable under section 5376 of such title, as*
18 *may be necessary to provide for the performance of such*
19 *duties as may be prescribed by the Board in connection*
20 *with the exercise of its powers and functions under this Act.*
21 *Section 14(a)(3) shall apply to each limited term appoint-*
22 *ment of technical and professional personnel under this sub-*
23 *section. Each appointment under this subsection shall be*
24 *subject to the same security requirements as those required*

1 *for personnel of the Foundation appointed under section*
 2 *14(a).”.*

3 *(c) INCREASE IN NUMBER OF WATERMAN AWARDS TO*
 4 *THREE.—Section 6(c) of the National Science Foundation*
 5 *Authorization Act of 1975 (42 U.S.C. 1881a) is amended*
 6 *to read as follows:*

7 *“(c) Up to three awards may be made under this sec-*
 8 *tion in any one fiscal year.”.*

9 **SEC. 17. NATIONAL SCIENCE BOARD REPORTS.**

10 *Paragraphs (1) and (2) of section 4(j) of the National*
 11 *Science Foundation Act of 1950 (42 U.S.C. 1863(j)(1) and*
 12 *(2)) are amended by striking “, for submission to” and “for*
 13 *submission to”, respectively, and inserting “and”.*

14 **SEC. 18. NATIONAL ACADEMY OF SCIENCE REPORT ON DI-**
 15 **VERSITY IN STEM FIELDS.**

16 *(a) IN GENERAL.—The Foundation shall enter into an*
 17 *arrangement with the National Academy of Sciences for a*
 18 *report, to be transmitted to the Congress not later than 1*
 19 *year after the date of enactment of this Act, about barriers*
 20 *to increasing the number of underrepresented minorities in*
 21 *science, technology, engineering, and mathematics fields*
 22 *and to identify strategies for bringing more underrep-*
 23 *resented minorities into the science, technology, engineering,*
 24 *and mathematics workforce.*

1 (b) *SPECIFIC REQUIREMENTS.*—*The Director shall en-*
2 *sure that the study described in subsection (a) addresses—*

3 (1) *social and institutional factors that shape the*
4 *decisions of minority students to commit to education*
5 *and careers in the science, technology, engineering,*
6 *and mathematics fields;*

7 (2) *specific barriers preventing greater minority*
8 *student participation in the science, technology, engi-*
9 *neering, and mathematics fields;*

10 (3) *primary focus points for policy intervention*
11 *to increase the recruitment and retention of underrep-*
12 *resented minorities in America’s future workforce;*

13 (4) *programs already underway to increase di-*
14 *versity in the science, technology, engineering, and*
15 *mathematics fields, and their level of effectiveness;*

16 (5) *factors that make such programs effective,*
17 *and how to expand and improve upon existing pro-*
18 *grams;*

19 (6) *the role of minority-serving institutions in*
20 *the diversification of America’s workforce in these*
21 *fields and how that role can be supported and*
22 *strengthened; and*

23 (7) *how the public and private sectors can better*
24 *assist minority students in their efforts to join Amer-*
25 *ica’s workforce in these fields.*

Union Calendar No. 68

110TH CONGRESS
1ST Session

H. R. 1867

[Report No. 110-114]

A BILL

To authorize appropriations for fiscal years 2008, 2009, and 2010 for the National Science Foundation, and for other purposes.

APRIL 30, 2007

Reported with an amendment, committed to the Committee of the Whole House on the State of the Union, and ordered to be printed